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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,747	10/23/2003	Richard J. Grupp	BUR920030062US1	2746
23550	7590	09/26/2006	EXAMINER	
HOFFMAN WARNICK & D'ALESSANDRO, LLC			DIMYAN, MAGID Y	
75 STATE STREET			ART UNIT	
14TH FLOOR			PAPER NUMBER	
ALBANY, NY 12207			2825	

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/605,747

Applicant(s)

GRUPP ET AL.

Examiner

Magid Y. Dimyan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-9, 12-19, 22 and 23 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 10, 11, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/23/03, 10/27/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

1. This is with reference to Application No. 10/605,747 filed 23 October 2003.

Claims 1 – 23 are pending in this Application.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 3, 6 – 9, 12 – 19, 22 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent No. 6,959,271 B1 to Ballam.

4. Referring to claim 1, Ballam cites a method for detecting signal strengths in a hardware description language – HDL (see col. 1, ll. 46 – 60; col. 4, ll. 19 - 42) that does not provide for such detection (see also col. 18, line 62 – Verilog does not provide for such detection) comprising: (a) creating a wired net configuration that provides for a data input signal and controlled reference signal (see Fig. 3; col. 6, ll. 15 – 35; col. 9, ll. 60 – 64); (b) varying the controlled reference signal based on a desired signal strength to be detected (see col. 9, ll. 1 – 59; Fig. 3); and (c) comparing the input signal with the controlled reference signal to determine the desired signal strength case been detected (see col. 10, line 31 – col. 11, line 50). Thus, Ballam teaches all the claimed elements.

5. As to claim 2, see col. 18, line 62, which recites that Verilog can be used as an alternative to VHDL, as claimed.
6. As for claim 3, see col. 4, ll. 7 – 49, which teach the range of signal strengths as claimed.
7. Pursuant to claim 6, see (4) above, and in particular Fig. 3, block 301; col. 8, line 51 – col. 10, line 56, which teach all the claimed elements pertaining to the input signal, controlled reference signal, and comparing the resolved value of the net with the input signal on the net to determine if the desired signal strength has been detected,
8. Regarding claims 7 and 17, Ballam discloses a module (claim 7 - see Fig. 3) and a computer program (claim 17 – see Fig. 6; col. 6, ll. 15 – 35) for detecting signal strengths in HDL that does not provide for such detection (see (4) above), the module comprising: (a) a first wired net for receiving an input signal and a controlled reference signal wherein the HDL resolves the first wired net to obtain a resolved value (see (4) and (7) above); (b) a scalar net for receiving a signal corresponding to an input signal (see again Fig. 3; and (7) above); and (c) a comparison system for comparing the resolved value on the first wired net with the signal corresponding to the input signal on the scalar net to determine if a desired signal strength has been detected (see again (7) above, and in particular Fig. 3). Thus, Ballam clearly teaches all the claimed limitations.
9. Claims 8 and 9 contain the same limitations of claims 2 and 3, respectively, and thus the same rejections apply.
10. As to claim 12, see Fig. 3, block 315, which shows the isolating element, as claimed.

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11. Pursuant to claims 13 and 14, see again Fig. 3, block 301; and Table T.2 (col. 11), which teach the claimed elements pertaining to including a buffer to produce the controlled reference signal.
12. As for claim 15, see col. 6, ll. 15 – 45, which teach how strobe – driven simulations (i.e., using vectors and vector comparison) are utilized to verify the HDL model, as claimed.
13. As to claim 16, see col. 4, ll. 19 – 42, col. 6, ll. 15 – 35, and col. 7, line 52 – col. 8, line 35, which all teach the levels of the desired signal strength, as claimed.
14. Claims 18 and 19 contain the same limitations of claims 2 and 3, respectively, and thus the same rejections apply.
15. Claim 22 contains the same limitations of claim 15, and thus the same rejections apply.
16. Claim 23 contains the identical limitations found in claims 7, 8 and 16, and thus the same rejections also apply.

### ***Allowable Subject Matter***

17. Claims 4, 5, 10, 11, 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
18. The following is a statement of reasons for the indication of allowable subject matter: prior art does not teach the additional claimed limitations pertaining the controlled reference signal having a signal strength larger than the range of signal strengths, or is exactly opposite to the desired signal strength to be detected.

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### ***Conclusion***

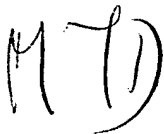
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magid Y. Dimyan whose telephone number is (571) 272-1889. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Magid Y Dimyan  
Examiner  
Art Unit 2825

myd  
19 September 2006



PAUL DINH  
PRIMARY EXAMINER

